

Appl. No. 10/751,607

Reply to Office action of Oct. 16, 2005

Amendments to the Claims:

Claims 1-12 are pending in the present application. Claims 1-2 and 4-12 have been amended as set forth below. Claim 3 is canceled. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended): An electrode on a substrate of a plasma display panel, comprising:
a plurality of bus line conductors having a first width; and
relatively wide a plurality of pads of the electrode, each pad having at least one widest section having a maximum width that is wider than the first width, each pad having at least one wider section that is narrower than the maximum width, the respective wider section of each pad intersecting a relatively narrow corresponding bus line conductor; and
at an intersection of each pad with a corresponding bus line conductor, a line width of the pad being wider than a line width of the bus line conductor and substantially narrower than a line width of a wider section of the pad.
2. (Currently Amended) The electrode of claim 1, further comprising:
the wider section of ~~the~~each pad having a gradually increasing width.
3. (Cancelled)
4. (Currently Amended) The electrode of claim 1, ~~further comprising:~~
a portion of the electrode between the intersection and the wider section of the pad wherein the wider section compriseshaving a curved profile.
5. (Currently Amended) The electrode of claim 1, ~~further comprising:~~
a portion of the electrode between the intersection and the wider section of the pad havingwherein the wider section comprises a tapered profile.
6. (Currently Amended)The electrode of claim 1, ~~further comprising:~~

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~~a portion of the electrode between the intersection and the wider section of the pad~~
having wherein the wider section comprises a straight tapered profile.

7. (Currently Amended) The electrode of claim 1, ~~further comprising:~~
~~a portion of the electrode between the intersection and the wider section of the pad~~
having wherein the wider section comprises a gradually increasing line width.
8. (Currently Amended) The electrode of claim 1, ~~further comprising:~~
~~a portion of the electrode between the intersection and the wider section of the pad~~
having wherein the wider section comprises an abruptly increased line width.
9. (Currently Amended) The electrode of claim 1, ~~further comprising:~~
~~a portion of the electrode between the intersection and the wider section of the pad~~
having wherein the wider section comprises a first tapered profile; and
the wider section of the pad having a second tapered profile.
10. (Currently Amended) The electrode of claim 1, ~~further comprising:~~
the pad having a section of maximum width along wherein the widest section comprises a
pointed profile.
11. (Currently Amended) The electrode of claim 1, ~~further comprising:~~
the pad having a section of maximum width along wherein the widest section comprises a
curved profile.
12. (Currently Amended) The electrode of claim 1, ~~further comprising:~~
the pad having a section of maximum width along wherein the widest section comprises a
straight profile.
13. (Withdrawn) A method of making an electrode on a substrate of a plasma display device,
comprising:
depositing an electrode material on the substrate;
depositing a layer of photo resist material on the electrode material;

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patterning a beam of electromagnetic radiation with a patterned mask that defines a pattern of electrodes with corresponding bus line conductors intersecting enlarged pads;

focusing the patterned beam to irradiate the photo resist material with an irradiated pattern of electrodes with corresponding bus line conductors and enlarged pads interconnected at intersections;

washing the patterned photo resist with a developer;

selectively etching the electrode material to form a pattern of electrodes on the substrate;

firing the substrate and the electrodes thereon, and

avoiding a cause for a break in each electrode by making at each intersection a line width of the pad being wider than a line width of the bus line conductor, and substantially narrower than a line width of a wider section of the pad.

14. (Withdrawn) The method of claim 13, further comprising:

making the irradiated pattern with an electrode profile streamlined or curved, to eliminate a side cut at a sharp angle in the profile that would cause an electrode break.

15. (Withdrawn) The method of claim 13, further comprising:

making the irradiated pattern with the wider section of the pad with a gradually increasing width, so as to further avoid being a cause for a break in the electrode.

16. (Withdrawn) The method of claim 13, further comprising:

making the irradiated pattern with a first tapered profile on a portion of the electrode between the intersection and the wider section of the pad; and

making the irradiated pattern with a second tapered profile on the wider section of the pad.

17. (Withdrawn) The method of claim 13, further comprising:

making the irradiated pattern with a section of maximum width along a curved profile of each pad.

18. (Withdrawn) The method of claim 13, further comprising:

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making the irradiated pattern with a section of maximum width along a pointed profile of each pad.

19. (Withdrawn) The method of claim 13, further comprising:

making the irradiated pattern with a section of maximum width along a flat profile of each pad.

20. (Withdrawn) The method of claim 13, further comprising:

making the irradiated pattern with an abrupt line width change between the intersection and the section of maximum width.